



SEQUENCE LISTING

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<120> PROTEASE-ACTIVATED RECEPTOR 3 AND USES
THEREOF

<130> 220002060310

<140> US 09/208,629

<141> 1998-12-08

<150> US 08/742,440

<151> 1996-10-30

<160> 27

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1224

<212> DNA

<213> Mus Musculus

<400> 1

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atgtttcaga caactcagca aagccaacct taactattaa gagttttaat ggggggtcccc 180
aaaatacctt tgaagaattc ccactttctg acatagaggg ctggacagga gccaccacaa 240
ctataaaaagc ggagtgtccc gaggacagta tttcaactct ccacgtgaat aatgctacca 300
taggataacct gagaagttcc ttaagtaccc aagtgatacc tgccatctat atcctgctgt 360
ttgtggttgg tgtaccatcc aacatcgtga ccctgtggaa actctcctta aggaccaa 420
ccatcagctc ggtcatcttt cacaccaacc tggccatcgc agatctcctt ttctgtgtca 480
cactgccatt taagatcgcc taccatctca atggcaacaa ctgggtattt ggcgaggtca 540
tgtgccggat caccacggtc gttttctacg gcaacatgta ctgcgctatc ctgatcctca 600
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ccaaacgcag cttctccttg ctcatgtgtg gcatagtgtg ggtcatgggt ttcttataca 720
tgctgccctt tgtcatcctg aagcaggagt accacctcgt ccactcagag atcaccacct 780
gccacgatgt cgtcgacgcg tgcgagtcce catcatcctt ccgattctac tacttcgtct 840
ccttagcatt ctttgggttc ctcatcccgt ttgtgatcat catcttctgt tacacgactc 900
tcatccacaa acttaaatca aaggatcgga tatggctggg ctacatcaag gccgtcctcc 960
tcatccttgt gattttcaca atttgctttg cccccacaa catcatactc gtaatccacc 1020
atgccaaacta ctactaccac aataccgaca gcttgactt tatgtatctt attgctctgt 1080
gcctggggag cctgaatagc tgcctagatc cattccttta ctttgtcatg tcgaaagttg 1140
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<210> 2

<211> 1124

<212> DNA

<213> Mus Musculus

<220>

<221> misc_feature

<222> 117, 118, 119, 120, 121, 122, 123, 350, 351, 442,
443, 444, 595, 596, 597, 663, 785, 859, 860, 861, 862, 863,
864

<223> n = A, T, C, or G

<400> 2

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nnntacaact ctccatgtga ataatgctac catgggatac ctgagaagtt ccttaagtac 180
caaagtgata cctgccatct acatcctggt gtttgtgatt ggtgtaccag cgaacatcgt 240
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gantcccat catccttcct attctactac ttcgtctcct tagcattctt tgggttcctc 720
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gcatggcacc atcagctcaa tttttaattt ttttaattta atttaattta attttatgtt 960
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<210> 3

<211> 369

<212> PRT

<213> Mus Musculus

<400> 3

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Thr Val Cys Gln Ser Gly Ile Asn Val Ser Asp Asn Ser Ala Lys Pro
 20          25          30
Thr Leu Thr Ile Lys Ser Phe Asn Gly Gly Pro Gln Asn Thr Phe Glu
 35          40          45
Glu Phe Pro Leu Ser Asp Ile Glu Gly Trp Thr Gly Ala Thr Thr Thr
 50          55          60
Ile Lys Ala Glu Cys Pro Glu Asp Ser Ile Ser Thr Leu His Val Asn
 65          70          75          80
Asn Ala Thr Ile Gly Tyr Leu Arg Ser Ser Leu Ser Thr Gln Val Ile
 85          90          95
Pro Ala Ile Tyr Ile Leu Leu Phe Val Val Gly Val Pro Ser Asn Ile
 100         105         110
Val Thr Leu Trp Lys Leu Ser Leu Arg Thr Lys Ser Ile Ser Leu Val
 115         120         125
Ile Phe His Thr Asn Leu Ala Ile Ala Asp Leu Leu Phe Cys Val Thr
 130         135         140
Leu Pro Phe Lys Ile Ala Tyr His Leu Asn Gly Asn Asn Trp Val Phe
 145         150         155         160
Gly Glu Val Met Cys Arg Ile Thr Thr Val Val Phe Tyr Gly Asn Met
 165         170         175
Tyr Cys Ala Ile Leu Ile Leu Thr Cys Met Gly Ile Asn Arg Tyr Leu
 180         185         190
Ala Thr Ala His Pro Phe Thr Tyr Gln Lys Leu Pro Lys Arg Ser Phe
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<400> 5

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ggagccacga ttactgtaaa aattaagtgc cctgaagaaa gtgcttcaca tctccatgtg 180
aaaaatgcta ccatggggta cctgaccagc tccttaagta ctaaactgat acctgccatc 240
tacctcctgg tgttttagt tggtgtcccg gccaatgctg tgaccctgtg gatgcttttc 300
ttcaggacca gatccatctg taccactgta ttctacacca acctggccat tgcagatttt 360
cttttttggt ttacattgcc ctttaagata gcttatcatc tcaatgggaa caactgggta 420
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taccggggcc tgcccaagca cacctatgcc ttggtaacat gtggactggg gtgggcaaca 600
gttttcttat atatgctgcc atttttcata ctgaagcagg aatattatct tgttcagcca 660
gacatcacca cctgccatga tgttcacaa acctgcgagt cctcatctcc cttccaactc 720
tattacttca tctccttggt attccttgga ttcttaattc catttggtgt tatcatctac 780
tgctatgcag ccatcatccg gacacttaat gcatacgatc atagatgggt gtggtatggt 840
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cttattattc accatgctaa ctactactac aacaacactg atggcttata ttttatatat 960
ctcatagctt tgtgcctggg tagtcttaat agttgcttag atccattcct ttattttctc 1020
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<210> 6

<211> 374

<212> PRT

<213> Homo Sapiens

<400> 6

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Met Lys Ala Leu Ile Phe Ala Ala Ala Gly Leu Leu Leu Leu Pro
1          5          10          15
Thr Phe Cys Gln Ser Gly Met Glu Asn Asp Thr Asn Asn Leu Ala Lys
20          25          30
Pro Thr Leu Pro Ile Lys Thr Phe Arg Gly Ala Pro Pro Asn Ser Phe
35          40          45
Glu Glu Phe Pro Phe Ser Ala Leu Glu Gly Trp Thr Gly Ala Thr Ile
50          55          60
Thr Val Lys Ile Lys Cys Pro Glu Glu Ser Ala Ser His Leu His Val
65          70          75          80
Lys Asn Ala Thr Met Gly Tyr Leu Thr Ser Ser Leu Ser Thr Lys Leu
85          90          95
Ile Pro Ala Ile Tyr Leu Leu Val Phe Val Val Gly Val Pro Ala Asn
100          105          110
Ala Val Thr Leu Trp Met Leu Phe Arg Thr Arg Ser Ile Cys Thr
115          120          125
Thr Val Phe Tyr Thr Asn Leu Ala Ile Ala Asp Phe Leu Phe Cys Val
130          135          140
Thr Leu Pro Phe Lys Ile Ala Tyr His Leu Asn Gly Asn Asn Trp Val
145          150          155          160
Phe Gly Glu Val Leu Cys Arg Ala Thr Thr Val Ile Phe Tyr Gly Asn
165          170          175
Met Tyr Cys Ser Ile Leu Leu Leu Ala Cys Ile Ser Ile Asn Arg Tyr
180          185          190
Leu Ala Ile Val His Pro Phe Thr Tyr Arg Gly Leu Pro Lys His Thr
195          200          205
Tyr Ala Leu Val Thr Cys Gly Leu Val Trp Ala Thr Val Phe Leu Tyr
210          215          220

```

Met Leu Pro Phe Phe Ile Leu Lys Gln Glu Tyr Tyr Leu Val Gln Pro
 225 230 235 240
 Asp Ile Thr Thr Cys His Asp Val His Asn Thr Cys Glu Ser Ser Ser
 245 250 255
 Pro Phe Gln Leu Tyr Tyr Phe Ile Ser Leu Ala Phe Phe Gly Phe Leu
 260 265 270
 Ile Pro Phe Val Leu Ile Ile Tyr Cys Tyr Ala Ala Ile Ile Arg Thr
 275 280 285
 Leu Asn Ala Tyr Asp His Arg Trp Leu Trp Tyr Val Lys Ala Ser Leu
 290 295 300
 Leu Ile Leu Val Ile Phe Thr Ile Cys Phe Ala Pro Ser Asn Ile Ile
 305 310 315 320
 Leu Ile Ile His His Ala Asn Tyr Tyr Tyr Asn Asn Thr Asp Gly Leu
 325 330 335
 Tyr Phe Ile Tyr Leu Ile Ala Leu Cys Leu Gly Ser Leu Asn Ser Cys
 340 345 350
 Leu Asp Pro Phe Leu Tyr Phe Leu Met Ser Lys Thr Arg Asn His Ser
 355 360 365
 Thr Ala Tyr Leu Thr Lys
 370

<210> 7
 <211> 425
 <212> PRT
 <213> Homo Sapiens

<400> 7
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 1 5 10 15
 Gly Pro Leu Leu Ser Ala Arg Thr Arg Ala Arg Arg Pro Glu Ser Lys
 20 25 30
 Ala Thr Asn Ala Thr Leu Asp Pro Arg Ser Phe Leu Leu Arg Asn Pro
 35 40 45
 Asn Asp Lys Tyr Glu Pro Phe Trp Glu Asp Glu Glu Lys Asn Glu Ser
 50 55 60
 Gly Leu Thr Glu Tyr Arg Leu Val Ser Ile Asn Lys Ser Ser Pro Leu
 65 70 75 80
 Gln Lys Gln Leu Pro Ala Phe Ile Ser Glu Asp Ala Ser Gly Tyr Leu
 85 90 95
 Thr Ser Ser Trp Leu Thr Leu Phe Val Pro Ser Val Tyr Thr Gly Val
 100 105 110
 Phe Val Val Ser Leu Pro Leu Asn Ile Met Ala Ile Val Val Phe Ile
 115 120 125
 Leu Lys Met Lys Val Lys Lys Pro Ala Val Val Tyr Met Leu His Leu
 130 135 140
 Ala Thr Ala Asp Val Leu Phe Val Ser Val Leu Pro Phe Lys Ile Ser
 145 150 155 160
 Tyr Tyr Phe Ser Gly Ser Asp Trp Gln Phe Gly Ser Glu Leu Cys Arg
 165 170 175
 Phe Val Thr Ala Ala Phe Tyr Cys Asn Met Tyr Ala Ser Ile Leu Leu
 180 185 190
 Met Thr Val Ile Ser Ile Asp Arg Phe Leu Ala Val Val Tyr Pro Met
 195 200 205
 Gln Ser Leu Ser Trp Arg Thr Leu Gly Arg Ala Ser Phe Thr Cys Leu
 210 215 220
 Ala Ile Trp Ala Leu Ala Ile Ala Gly Val Val Pro Leu Val Leu Lys

225 230 235 240
 Glu Gln Thr Ile Gln Val Pro Gly Leu Asn Ile Thr Thr Cys His Asp
 245 250 255
 Val Leu Asn Glu Thr Leu Leu Glu Gly Tyr Tyr Ala Tyr Tyr Phe Ser
 260 265 270
 Ala Phe Ser Ala Val Phe Phe Phe Val Pro Leu Ile Ile Ser Thr Val
 275 280 285
 Cys Tyr Val Ser Ile Ile Arg Cys Leu Ser Ser Ser Ala Val Ala Asn
 290 295 300
 Arg Ser Lys Lys Ser Arg Ala Leu Phe Leu Ser Ala Ala Val Phe Cys
 305 310 315 320
 Ile Phe Ile Ile Cys Phe Gly Pro Thr Asn Val Leu Leu Ile Ala His
 325 330 335
 Tyr Ser Phe Leu Ser His Thr Ser Thr Thr Glu Ala Ala Tyr Phe Ala
 340 345 350
 Tyr Leu Leu Cys Val Cys Val Ser Ser Ile Ser Ser Cys Ile Asp Pro
 355 360 365
 Leu Ile Tyr Tyr Tyr Ala Ser Ser Glu Cys Gln Arg Tyr Val Tyr Ser
 370 375 380
 Ile Leu Cys Cys Lys Glu Ser Ser Asp Pro Ser Ser Tyr Asn Ser Ser
 385 390 395 400
 Gly Gln Leu Met Ala Ser Lys Met Asp Thr Cys Ser Ser Asn Leu Asn
 405 410 415
 Asn Ser Ile Tyr Lys Lys Leu Leu Thr
 420 425

<210> 8

<211> 394

<212> PRT

<213> Homo Sapiens

<400> 8

Met Arg Ser Pro Ser Ala Ala Trp Leu Leu Gly Ala Ala Ile Leu Leu
 1 5 10 15
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 20 25 30
 Ser Lys Gly Arg Ser Leu Ile Gly Lys Val Asp Gly Thr Ser His Val
 35 40 45
 Thr Gly Lys Gly Val Thr Val Glu Thr Val Phe Ser Val Asp Glu Phe
 50 55 60
 Ser Ala Ser Val Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Ile
 65 70 75 80
 Val Tyr Thr Ile Val Phe Val Val Gly Leu Pro Ser Asn Gly Met Ala
 85 90 95
 Leu Trp Val Phe Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile
 100 105 110
 Tyr Met Ala Asn Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe
 115 120 125
 Pro Leu Lys Ile Ala Tyr His Ile His Gly Asn Asn Trp Ile Tyr Gly
 130 135 140
 Glu Ala Leu Cys Asn Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr
 145 150 155 160
 Cys Ser Ile Leu Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val
 165 170 175
 Ile Val Asn Pro Met Gly His Ser Arg Lys Lys Ala Asn Ile Ala Ile
 180 185 190

Gly Ile Ser Leu Ala Ile Trp Leu Leu Ile Leu Leu Val Thr Ile Pro
 195 200 205
 Leu Tyr Val Val Lys Gln Thr Ile Phe Ile Pro Ala Leu Asn Ile Thr
 210 215 220
 Thr Cys His Asp Val Leu Pro Glu Gln Leu Leu Val Gly Asp Pro Phe
 225 230 235 240
 Leu Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Phe Leu Thr Ala
 245 250 255
 Ser Ala Tyr Val Leu Met Ile Arg Met Leu Arg Ser Ser Ala Met Asp
 260 265 270
 Glu Asn Ser Glu Lys Lys Arg Lys Arg Ala Ile Lys Leu Ile Val Thr
 275 280 285
 Val Leu Ala Met Tyr Leu Ile Cys Phe Thr Pro Ser Asn Leu Leu Leu
 290 295 300
 Val Val His Tyr Phe Leu Ile Lys Ser Gln Gly Gln Ser His Val Tyr
 305 310 315 320
 Ala Leu Tyr Ile Val Ala Leu Cys Leu Ser Thr Leu Asn Ser Cys Ile
 325 330 335
 Asp Pro Phe Val Tyr Tyr Phe Val Ser His Asp Phe Arg Asp His Ala
 340 345 350
 Lys Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Lys Gln Met Gln
 355 360 365
 Val Ser Leu Thr Ser Lys Lys His Ser Arg Lys Ser Ser Ser Tyr Ser
 370 375 380
 Ser Ser Ser Thr Thr Val Lys Thr Ser Tyr
 385 390

<210> 9
 <211> 11
 <212> PRT
 <213> Homo Sapiens

<400> 9
 Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu Gln
 1 5 10

<210> 10
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<221> misc_feature
 <222> 3, 12, 18, 21, 24
 <223> n = Inosine

<221> misc_feature
 <222> 22, 27
 <223> n = A, C, G, or T

<400> 10
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<210> 11
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<221> misc_feature
 <222> 6, 9, 12, 15, 21
 <223> n = Inosine

<221> misc_feature
 <222> 24
 <223> n = A, C, G, or T

<400> 11
 ggatanacna cngcnadrwa nckntc

26

<210> 12
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 12
 Asp Tyr Lys Asp Asp Asp
 1 5

<210> 13
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 13
 Met Asp Ser Lys Gly Ser Ser Gln Lys Gly Ser Arg Leu Leu Leu Leu
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 Leu Val Val Ser Asn Leu Leu Leu Cys Gln Gly Val Val Ser Asp Tyr
 20 25 30
 Lys Asp Asp Asp Asp Val Glu
 35

<210> 14
 <211> 5
 <212> PRT
 <213> Homo Sapiens

<400> 14
 Phe Glu Glu Phe Pro
 1 5

<210> 15
<211> 5
<212> PRT
<213> Homo Sapiens

<400> 15
Phe Glu Glu Ile Pro
1 5

<210> 16
<211> 5
<212> PRT
<213> Homo Sapiens

<400> 16
Tyr Glu Pro Phe Trp
1 5

<210> 17
<211> 9
<212> PRT
<213> Homo sapiens

<400> 17
Thr Phe Arg Gly Ala Pro Pro Asn Ser
1 5

<210> 18
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 18
Val Glu His His His His His His
1 5

<210> 19
<211> 23
<212> PRT
<213> Homo Sapiens

<400> 19
Leu Pro Ile Lys Thr Phe Arg Gly Ala Pro Pro Asn Ser Phe Glu Glu
1 5 10 15
Phe Pro Phe Ser Ala Leu Glu
20

<210> 20
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 20
Leu Pro Ile Lys Pro Phe Arg Gly Ala Pro Pro Asn Ser Phe Glu Glu
1 5 10 15
Phe Pro Phe Ala Leu Glu
20

<210> 21
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<221> VARIANT
<222> 1
<223> Xaa = beta-homoarginine

<400> 21
Xaa Thr Phe Arg Gly Ala Pro Pro Asn Ser Phe Glu Glu Phe Pro Phe
1 5 10 15
Ser Ala Leu Glu
20

<210> 22
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<221> VARIANT
<222> 1
<223> Xaa = D-phenylalanine

<400> 22
Xaa Pro Arg Pro Phe Arg Gly Ala Pro Pro Asn Ser Phe Glu Glu Phe
1 5 10 15
Pro Phe Ser Ala Leu Glu
20

<210> 23
<211> 4
<212> PRT
<213> Homo Sapiens

<400> 23
 Leu Pro Ile Lys
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<210> 24
 <211> 404
 <212> PRT
 <213> Mus Musculus

<400> 24
 Thr Leu Tyr Thr Gln His Pro Val Ala Gly Ser Gln Asp Ile Lys Met
 1 5 10 15
 Lys Ile Leu Ile Leu Val Ala Ala Gly Leu Leu Phe Leu Pro Val Thr
 20 25 30
 Val Cys Gln Ser Gly Ile Asn Val Ser Asp Asn Ser Ala Lys Pro Thr
 35 40 45
 Leu Thr Ile Lys Ser Phe Asn Gly Gly Pro Gln Asn Thr Phe Glu Glu
 50 55 60
 Phe Pro Leu Ser Asp Ile Glu Gly Trp Thr Gly Ala Thr Thr Thr Ile
 65 70 75 80
 Lys Ala Glu Cys Pro Glu Asp Ser Ile Ser Thr Leu His Val Asn Asn
 85 90 95
 Ala Thr Ile Gly Tyr Leu Arg Ser Ser Leu Ser Thr Gln Val Ile Pro
 100 105 110
 Ala Ile Tyr Ile Leu Leu Phe Val Gly Val Pro Ser Asn Ile Val
 115 120 125
 Thr Leu Trp Lys Leu Ser Leu Arg Thr Lys Ser Ile Ser Leu Val Ile
 130 135 140
 Phe His Thr Asn Leu Ala Ile Ala Asp Leu Leu Phe Cys Val Thr Leu
 145 150 155 160
 Pro Phe Lys Ile Ala Tyr His Leu Asn Gly Asn Asn Trp Val Phe Gly
 165 170 175
 Glu Val Met Cys Arg Ile Thr Thr Val Val Phe Tyr Gly Asn Met Tyr
 180 185 190
 Cys Ala Ile Leu Ile Leu Thr Cys Met Gly Ile Asn Arg Tyr Leu Ala
 195 200 205
 Thr Ala His Pro Phe Thr Tyr Gln Lys Leu Pro Lys Arg Ser Phe Ser
 210 215 220
 Leu Leu Met Cys Gly Ile Val Trp Val Met Val Phe Leu Tyr Met Leu
 225 230 235 240
 Pro Phe Val Ile Leu Lys Gln Glu Tyr His Leu Val His Ser Glu Ile
 245 250 255
 Thr Thr Cys His Asp Val Val Asp Ala Cys Glu Ser Pro Ser Ser Phe
 260 265 270
 Arg Phe Tyr Tyr Phe Val Ser Leu Ala Phe Phe Gly Phe Leu Ile Pro
 275 280 285
 Phe Val Ile Ile Ile Phe Cys Tyr Thr Thr Leu Ile His Lys Leu Lys
 290 295 300
 Ser Lys Asp Arg Ile Trp Leu Gly Tyr Ile Lys Ala Val Leu Leu Ile
 305 310 315 320
 Leu Val Ile Phe Thr Ile Cys Phe Ala Pro Thr Asn Ile Ile Leu Val
 325 330 335
 Ile His His Ala Asn Tyr Tyr Tyr His Asn Thr Asp Ser Leu Tyr Phe
 340 345 350
 Met Tyr Leu Ile Ala Leu Cys Leu Gly Ser Leu Asn Ser Cys Leu Asp

		355					360					365							
Pro	Phe	Leu	Tyr	Phe	Val	Met	Ser	Lys	Val	Val	Asp	Gln	Leu	Asn	Pro				
	370					375					380								
Ser	Ala	Met	Ala	Arg	Pro	Leu	Arg	Pro	Arg	Arg	Asp	Ile	Trp	Glu	Asp				
385					390					395					400				
Ile	His	Ala	Trp																

<210> 25
 <211> 405
 <212> PRT
 <213> Homo Sapiens

<400> 25																			
Cys	Ser	Met	Ile	Leu	Gln	Ile	Ser	Arg	Leu	Arg	Asp	Gly	Thr	Gln	Val				
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Ile	Lys	Met	Lys	Ala	Leu	Ile	Phe	Ala	Ala	Ala	Gly	Leu	Leu	Leu	Leu				
			20					25					30						
Leu	Pro	Thr	Phe	Cys	Gln	Ser	Gly	Met	Glu	Asn	Asp	Thr	Asn	Asn	Leu				
		35					40					45							
Ala	Lys	Pro	Thr	Leu	Pro	Ile	Lys	Thr	Phe	Arg	Gly	Ala	Pro	Pro	Asn				
	50					55					60								
Ser	Phe	Glu	Glu	Phe	Pro	Phe	Ser	Ala	Leu	Glu	Gly	Trp	Thr	Gly	Ala				
65					70					75					80				
Thr	Ile	Thr	Val	Lys	Ile	Lys	Cys	Pro	Glu	Glu	Ser	Ala	Ser	His	Leu				
			85						90					95					
His	Val	Lys	Asn	Ala	Thr	Met	Gly	Tyr	Leu	Thr	Ser	Ser	Leu	Ser	Thr				
		100						105					110						
Lys	Leu	Ile	Pro	Ala	Ile	Tyr	Leu	Leu	Val	Phe	Val	Val	Gly	Val	Pro				
		115					120					125							
Ala	Asn	Ala	Val	Thr	Leu	Trp	Met	Leu	Phe	Phe	Arg	Thr	Arg	Ser	Ile				
	130					135					140								
Cys	Thr	Thr	Val	Phe	Tyr	Thr	Asn	Leu	Ala	Ile	Ala	Asp	Phe	Leu	Phe				
145					150					155					160				
Cys	Val	Thr	Leu	Pro	Phe	Lys	Ile	Ala	Tyr	His	Leu	Asn	Gly	Asn	Asn				
			165					170					175						
Trp	Val	Phe	Gly	Glu	Val	Leu	Cys	Arg	Ala	Thr	Thr	Val	Ile	Phe	Tyr				
		180					185					190							
Gly	Asn	Met	Tyr	Cys	Ser	Ile	Leu	Leu	Leu	Ala	Cys	Ile	Ser	Ile	Asn				
	195					200					205								
Arg	Tyr	Leu	Ala	Ile	Val	His	Pro	Phe	Thr	Tyr	Arg	Gly	Leu	Pro	Lys				
	210					215					220								
His	Thr	Tyr	Ala	Leu	Val	Thr	Cys	Gly	Leu	Val	Trp	Ala	Thr	Val	Phe				
225					230					235					240				
Leu	Tyr	Met	Leu	Pro	Phe	Phe	Ile	Leu	Lys	Gln	Glu	Tyr	Tyr	Leu	Val				
			245						250					255					
Gln	Pro	Asp	Ile	Thr	Thr	Cys	His	Asp	Val	His	Asn	Thr	Cys	Glu	Ser				
		260						265				270							
Ser	Ser	Pro	Phe	Gln	Leu	Tyr	Tyr	Phe	Ile	Ser	Leu	Ala	Phe	Phe	Gly				
		275					280					285							
Phe	Leu	Ile	Pro	Phe	Val	Leu	Ile	Ile	Tyr	Cys	Tyr	Ala	Ala	Ile	Ile				
	290					295					300								
Arg	Thr	Leu	Asn	Ala	Tyr	Asp	His	Arg	Trp	Leu	Trp	Tyr	Val	Lys	Ala				
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Ile	Ile	Leu	Ile	Ile	His	His	Ala	Asn	Tyr	Tyr	Tyr	Asn	Asn	Thr	Asp
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Gly	Leu	Tyr	Phe	Ile	Tyr	Leu	Ile	Ala	Leu	Cys	Leu	Gly	Ser	Leu	Asn
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Ser	Cys	Leu	Asp	Pro	Phe	Leu	Tyr	Phe	Leu	Met	Ser	Lys	Thr	Arg	Asn
	370					375					380				
His	Ser	Thr	Ala	Tyr	Leu	Thr	Lys	Asn	Asp	Leu	Arg	Glu	Gln	Gly	Gln
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Pro	Ser	Gln	Arg	Thr											
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